Installation Guide

Release 2

Tecplot, Inc. **Bellevue, WA** **2008**

COPYRIGHT NOTICE

Tecplot 360™ Installation Guide is for use with Tecplot 360™ 2008 R2.
Copyright © 1988-2008 Tecplot, Inc. All rights reserved worldwide. Except for personal use, this manual may not be reproduced, transmitted, transcribed, stored in a retrieval system, or translated in any form, in whole or in part, without the express written permission of Tecplot, Inc., 3535 Factoria Blvd., Ste 550, Bellevue, Washington, 98006, U.S.A.
The software discussed in this documentation and the documentation itself are furnished under license for utilization and duplication *only* according to the license terms. The copyright for the software is held by Tecplot, Inc. Documentation is provided for information only. It is subject to change without notice. It should not be interpreted as a commitment by Tecplot, Inc. Tecplot, Inc. assumes no liability or responsibility for documentation errors or inaccuracies.

Tecplot, Inc.
Post Office Box 52708
Bellevue, WA 98015-2708 U.S.A.
Tel: 1.800.763.7005 (within the U.S. or Canada), 00 1 (425) 653-1200 (internationally)
email: sales@tecplot.com, support@tecplot.com
Questions, comments or concerns regarding this document: documentation@tecplot.com
For more information, visit http://www.tecplot.com

THIRD PARTY SOFTWARE COPYRIGHT NOTICES

SciPy 2001-2002 Enthought. Inc. All Rights Reserved. NumPy 2005 NumPy Developers. All Rights Reserved. VisTools and VdmTools 1992-2007 Visual Kinematics, Inc. All Rights Reserved. NCSA HDF & HDF5 (Hierarchical Data Format) Software Library and Utilities Contributors: National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign (UIUC), Lawrence Livermore National Laboratory (LLNL), Sandia National Laboratories (SNL), Los Alamos National Laboratory (LANL), Jean-loup Gailly and Mark Adler (gzip library). Copyright © 1998-2006 The Board of Trustees of the University of Illinois, Copyright © 2006-2008 The HDF Group (THG). All Rights Reserved. PNG Reference Library Copyright © 1995, 1996 Guy Eric Schalnat, Group 42, Inc., Copyright © 1996, 1997 Andreas Dilger, Copyright © 1998, 1999 Glenn Randers-Pehrson. All Rights Reserved. Tcl 1989-1994 The Regents of the University of California. Copyright © 1994 The Australian National University. Copyright © 1994-1998 Sun Microsystems, Inc. Copyright © 1998-1999 Scriptics Corporation. All Rights Reserved. bmptopnm 1992 David W. Sanderson. All Rights Reserved. Netpbm 1988 Jef Poskanzer . All Rights Reserved. Mesa 1999-2003 Brian Paul. All Rights Reserved. W3C IPR 1995-1998 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved. Ppmtopict 1990 Ken Yap. All Rights Reserved. JPEG 1991-1998 Thomas G. Lane. All Rights Reserved.

TRADEMARKS

Tecplot®, Tecplot 360™, the Tecplot 360 logo™, Preplot™, Enjoy the View™, and Framer™ are registered trademarks or trademarks of Tecplot, Inc. in the United States and other countries.

3D Systems is a registered trademark or trademark of 3D Systems Corporation in the U.S. and/or other countries. Macintosh OS is a registered trademark or trademark of Apple, Incorporated in the U.S. and/or other countries. Reflection-X is a registered trademark or trademark of Attachmate Corporation in the U.S. and/or other countries. EnSight is a registered trademark or trademark of Computation Engineering Internation (CEI), Incorporated in the U.S. and/or other countries. EDEM is a registered trademark or trademark of DEM Solutions Ltd in the U.S. and/or other countries. Exceed 3D, Hummingbird, and Exceed are registered trademarks or trademarks of Hummingbird Limited in the U.S. and/or other countries. Konqueror is a registered trademark or trademark of KDE e.V. in the U.S. and/or other countries. VIP and VDB are registered trademarks or trademarks of Halliburton in the U.S. and/or other countries. ECLIPSE FrontSim is a registered trademark or trademark of Schlumberger Information Solutions (SIS) in the U.S. and/or other countries. Debian is a registered trademark or trademark of Software in the Public Interest, Incorporated in the U.S. and/or other countries. X3D is a registered trademark or trademark of Web3D Consortium in the U.S. and/or other countries. X Window System is a registered trademark or trademark of X Consortium, Incorporated in the U.S. and/or other countries. ANSYS, Fluent and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS Incorporated or its subsidiaries in the U.S. and/or other countries. PAM-CRASH is a registered trademark or trademark of ESI Group in the U.S. and/or other countries. LS-DYNA is a registered trademark or trademark of Livermore Software Technology Coroporation in the U.S. and/or other countries. MSC/NASTRAN is a registered trademark or trademark of MSC.Software Corporation in the U.S. and/or other countries. NASTRAN is a registered trademark or trademark of National Aeronautics Space Administration in the U.S. and/or other countries. 3DSL is a registered trademark or trademark of StreamSim Technologies, Incorporated in the U.S. and/or other countries. SDRC/IDEAS Universal is a registered trademark or trademark of UGS PLM Solutions Incorporated or its subsidiaries in the U.S. and/or other countries. Star-CCM+ is a registered trademark or trademark of CD-adapco in the U.S. and/or other countries. FLEXnet is a registered trademark or trademark of Macrovision Corporation and/or Macrovision Europe Ltd in the U.S. and/or other countries. Python is a registered trademark or trademark of Python Software Foundation in the U.S. and/or other countries. Abaqus, the 3DS logo, SIMULIA and CATIA are registered trademarks or trademarks of Dassault Systèmes in the U.S. and/or other countries. The Abaqus runtime libraries are a product of Dassault Systèmes Simulia Corp., Providence, RI, USA. FLOW-3D is a registered trademark or trademark of Flow Science, Incorporated in the U.S. and/or other countries. Adobe, Flash, Flash Player, Premier and PostScript are registered trademarks or trademarks of Adobe Systems, Incorporated in the U.S. and/or other countries. AutoCAD and DXF are registered trademarks or trademarks of Autodesk, Incorporated in the U.S. and/or other countries. Ubuntu is a registered trademark or trademark of Canonical Limited in the U.S. and/or other countries. HP, LaserJet and PaintJet are registered trademarks or trademarks of Hewlett-Packard Development Company, Limited Partnership in the U.S. and/or other countries. IBM, RS/6000 and AIX are registered trademarks or trademarks of International Business Machines Corporation in the U.S. and/or other countries. Helvetica Font Family and Times Font Family are registered trademarks or trademarks of Linotype GmbH in the U.S. and/or other countries. Linux is a registered trademark or trademark of Linus Torvalds in the U.S. and/or other countries. ActiveX, Excel, Microsoft, Visual C++, Visual Studio, Windows, Windows Metafile, Windows XP, Windows Vista, Windows 2000 and PowerPoint are registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. Firefox is a registered trademark or trademark of The Mozilla Foundation in the U.S. and/or other countries. Netscape is a registered trademark or trademark of Netscape Communications Corporation in the U.S. and/or other countries. SUSE is a registered trademark or trademark of Novell, Incorporated in the U.S. and/or other countries. Red Hat is a registered trademark or trademark of Red Hat, Incorporated in the U.S. and/or other countries. SPARC is a registered trademark or trademark of SPARC International, Incorporated in the U.S. and/or other countries. Products bearing SPARC trademarks are based on an architecture developed by Sun Microsystems, Inc. Solaris, Sun and SunRaster are registered trademarks or trademarks of Sun MicroSystems, Incorporated in the U.S. and/or other countries. Courier is a registered trademark or trademark of Monotype Imaging Incorporated in the U.S. and/or other countries. UNIX and Motif are registered trademarks or trademarks of The Open Group in the U.S. and/or other countries. Qt is a registered trademark or trademark of Trolltech in the U.S. and/or other countries. Zlib is a registered trademark or trademark of Jean-loup Gailly and Mark Adler in the U.S. and/or other countries. OpenGL is a registered trademark or trademark of Silicon Graphics, Incorporated in the U.S. and/or other countries. JPEG is a registered trademark or trademark of Thomas G. Lane in the U.S. and/or other countries. All other product names mentioned herein are trademarks or registered trademarks of their respective owners.

NOTICE TO U.S. GOVERNMENT END-USERS

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraphs (a) through (d) of the Commercial Computer-Restricted Rights clause at FAR 52.227-19 when applicable, or in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, and/or in similar or successor clauses in the DOD or NASA FAR Supplement. Contractor/manufacturer is Tecplot, Inc., 3535 Factoria Blvd, Ste. 550; Bellevue, WA 98006 U.S.A..

08-360-03-2
Rev 09/2008

Table of Contents

Introduction **5**

Overview **5**

Installing the Tecplot License Manager **5**

Third Party Software **5**

Getting Started **7**

Technical Support **7**

License Number **7**

Pre-release Testers **7**

System, Graphics, and Display Recommendations **7**

Supported Platforms **8**

Windows Installation **11**

Windows Installation Instructions **11**

Local License Manager Files Installation **14**

Macintosh Installation **17**

Macintosh Installation Instructions **17**

Local License Manager Files Installation **19**

Linux Installation **21**

Environment Variable Setup **21**

Linux Installation Instructions **22**

Local License Manager Files Installation **23**

Additional Information 25

License Manager Installation 27

FLEX LM Installation on Windows Platforms 27

FLEX LM Installation on Mac/Linux Platforms. 31

Running the License Administration Tools. 33

Useful Information. 35

User Documentation Sources 35

License Type Definitions 36

Checking Out/Returning Licenses Over a Network 37

Common License File Error Message. 39

Obtaining License Key Files. 39

Changing License Servers. 39

License File Syntax. 40

Network Licenses for Multiple Tecplot Products 40

Troubleshooting Your Connection to FLEX LM 41

Running FLEX LM on Windows XP Platforms 41

Running Tecplot Products on a Laptop. 42

Introduction

Overview

This installation guide contains instructions to help you successfully install Tecplot 360 and the FLEXnet License Manager. In order to complete the installation process, you must have a basic understanding of file editing, directory navigation, path names, environment variables, and aliases. If you are unfamiliar with any of these topics, please ask your System Administrator for assistance.

The Tecplot 360 installation is now available primarily as a download. Download the appropriate setup file to begin. If you have difficulty downloading the Tecplot 360 install file, please contact Technical Support for help.

Installing the Tecplot License Manager

Tecplot 360 Version 2008 Release 2, when purchased with the **Network** or **Site** license, includes a license manager powered by FLEXnet™. This Tecplot License Manager (FLEX LM) allows network administrators to "float" licenses anywhere on a network, and it allows users to "borrow" and "return" these network licenses.

You must install the Tecplot License Manager separately from Tecplot 360. If you have a **Network** or **Site** license, the System Administrator must install FLEX LM on the server before you can run Tecplot 360.

Refer to "License Manager Installation" on page 6 for instructions on how to install and configure the Tecplot License Manager.

Third Party Software

For your convenience, we have provided the following third party software in the *thirdparty* directory of your Tecplot 360 DVD. We do not provide technical support for this software. Please contact the appropriate support group for assistance.

- **ActiveState® Komodo® Editor** - Handy tool for editing Python scripts
- **Adobe® Flash® Player** - Tool for use in viewing *.swf* files
- **GlobFX® Swiff Point Player® for Windows** - Player for use in viewing *.swf* files
- **Octaga™ X3D™ Player** - Tool to use to view X3D plots

Getting Started

Technical Support

If you have difficulty performing the installation, we recommend that you review the "Useful Information" on page 14. A detailed, searchable knowledge base is available online at

www.tecplot.com/support/installation.aspx.

Our **Tecplot Talk** online forum also serves as an ever-expanding resource for dynamic answers from other Tecplot product users as well as from Tecplot Technical Support personnel. Visit the forum at www.tecplottalk.com.

If the above resources do not meet your needs, please contact the Tecplot Technical Support Team, using any of the following methods:

- Internet: www.tecplot.com/support
- E-mail: support@tecplot.com
- Telephone: +1-425-653-9393

Please include your license number when contacting Technical Support.

License Number

In order to complete your installation, you will need to know your license number. If you downloaded your installation and do not have a license number, contact Technical Support. If you have an install DVD, your license number is provided on a yellow sticker inside your installation DVD case. Your license number (for example, L00000) enables you to procure your license key.

Pre-release Testers

If you participated in our pre-release testing, you must uninstall your pre-release version of Tecplot 360 or Tecplot Focus before installing the released version of the product.

System, Graphics, and Display Recommendations

We recommend using a machine that meets the following minimum requirements:

- **System Requirements** - 500 MB disk space and 2 GB RAM[1]
- **Graphics Requirements** - An OpenGL®-accelerated card
- **Display Requirements** - Minimum resolution of 1024 x 768

Supported Platforms

Tecplot 360 supports the following platforms.

Supported 32-bit Platforms

Platform	CPU/ Model	Download File	Tested On	Should Work On*
Windows®	x86	setup360_win32.exe	Windows XP® Service Pack 3, Windows Vista® Business Edition Service Pack 1	Windows Server 2003, XP Service Pack 2, Other Versions of Windows Vista
Linux®	x86	linuxg23.24	Red Hat® 9 Suse® 10.1 Fedora® Core 4, 5	Debian® 3.2 Fedora Core 3 Suse 9.1, 9.2, 10, 10.2 RHEL® 3
Linux	x86	linux.26	Ubuntu® 6.06 LTS	Debian 4.0 Fedora Core 6, 7, 8, 9 Mandriva 2007, 2008 RHEL 4, 5 Ubuntu 6.10, 7.10†, 8.04
Macintosh®	x86	macix.104	Macintosh OSX 10.4.8	Macintosh OSX 10.5
Macintosh	PPC	macix.103	Macintosh OSX 10.3	Macintosh OSX 10.4

1. We have found these requirements comfortable for product interaction. In general, Tecplot products will run well if your machine has a good amount of system memory.

Supported 64-bit Platforms

Platform	CPU/ Model	Download File	Tested On	Should Work On*
Windows	x86_64	setup360_win64.exe	Windows XP 64‡ Windows Vista 64	Windows Server 2003
Linux	IA64 (Itanium)	linuxi64.26	SUSE 10 SP1	OpenSUSE 10.x
Linux	x86_64	linux64.24	Suse 9.0	N/A
Linux	x86_64	linux64.26	Suse 9.2	Suse 10.2
Linux	x86_64	linuxg248x64.26	Fedora Core 5, Suse 10.1	Debian 4.0 Fedora Core 6, 7, 8, 9 Mandriva 2007, 2008 SUSE 10.0, 10.2 Ubuntu 6.06 LTS, 6.10, 7.10, 8.04
HP	PA-RISC	hp7xx64.11	HP/UX 11	HP/UX 11.1
HP	IA64	hpi64.11	HP/UX 11.2i	HP/UX 11.3i or newer
IBM	RS/6000	ibm64.51	IBM® AIX® 5.1	AIX 5.2, 5.3
Sun®	SPARC®	sun464.59	Solaris 9	Solaris 10

*We have not fully tested these platforms, but our beta testers report success in using them.
†Ubuntu 7.04 has a server prone to crashing and does not work well with Tecplot software. The 7.10 version introduced a composite visualization module that interferes with Tecplot products. Ubuntu addressed this issue with their 8.04 version, which we recommend using with your Tecplot products.
‡We do not support using the 32-bit (x86) version of Tecplot 360 on Windows 64-bit operating systems. Please use the 64-bit (x86_64) version of Tecplot 360.

Windows Installation

Each license type (**Single-User**, **Network** or **Site**) for Windows® platforms requires the same preliminary installation steps, as provided in the following section.

If you install on Windows Vista®, you may need to follow a few extra steps to resolve video card issues. See "Additional Information: Windows Vista Users" on page 15 for details on how to resolve these issues.

Windows Installation Instructions

1. **Install Directory** For a download installation, save the appropriate setup file to disk from http://www.tecplot.com (see Step 2.). For a DVD installation, insert the Tecplot 360 DVD into your DVD drive.

SYSTEM ADMINISTRATORS

To install Tecplot 360 on a network server as the System Administrator, you can go to the command line and navigate to the directory that contains your saved setup file. For example, if installing from a DVD, type:

```
D:
CD windows
```

Then type the following, depending on your platform:

```
setup360_win32.exe /a
setup360_win64.exe /a
```

The administrative installation option copies all of the files and subdirectories included in a full installation to a user-specified folder. This installation will not set environment variables, shortcuts, or icons.

If you choose to install Tecplot 360 for use with either a **Network** or **Site** license, you must also install the License Manager software. Refer to "License Manager Installation" on page 6 for details.

2. **Install File** To install from a downloaded file, navigate to the location of your saved setup file and double-click the executable file to begin installation. To install from DVD, navigate to the *Windows* directory of your DVD and double-click *setup360_win32.exe* or *setup360_win64.exe* (located within the *win32* or *win64* subdirectory).

   If you choose to install on Windows Vista, you must right-click the executable and select **Run as Administrator**.
3. **Python™ 2.5.1** If you do not already have Python™ 2.5.1 installed, the **InstallShield Wizard** will prompt you to install it. Tecplot 360 requires the Python library to run Python scripts. Select the [Install] button to install Python™ 2.5.1 on your system. Finish the installation of Python™ 2.5.1, and select [Next] to continue with the Tecplot 360 installation process.
4. **License Agreement** Read and accept the license agreement.
5. **Installation Type** Select your installation type:
   - **Purchased** Select "Purchased" if you have purchased Tecplot 360 and have a valid **Single-User**, **Network**, or **Site** license.
   - **Evaluation** Select "Evaluation" if you are installing the free trial version of Tecplot 360.
6. **License Type** If you selected "Purchased" in Step 5., select your license type (**Single-User**, **Network**, or **Site**), and select the [Next] button.

Your license type is provided on the yellow sticker inside your DVD case. See "License Type Definitions" on page 15 for details. If you downloaded your installation and do not have a license number, contact Technical Support.

7. **Server** If you chose **Network License** or **Site License** as your license type, enter the name of your License Manager server in the "myserver" field. We recommend that you use the default port number of "27001". If that port is already in

use, please contact your System Administrator for an available port number and enter it in this field.

If you do not know your server information, you may leave the entry as “myserver” and proceed with the installation.

Once you receive the server information from your System Administrator, replace “myserver” in your *tecplotlm.lic* file with the correct information. Your installation creates this file in your Tecplot 360 installation directory (by default, *C:\Program Files\Tecplot\Tec360 2008*). You cannot run Tecplot 360 successfully until the file contains your server information.

8. **User Information** Fill out the Name and Organization fields. If you have a “Purchased” license (**Single-User**, **Network**, or **Site**), enter the License Number as well.
9. **Computer Permissions** Select whether to install Tecplot 360 for yourself or all users.

You must have administrator rights on your computer in order to install Tecplot 360 for all users.

10. **Destination Folder** Tecplot 360 will install into this folder. Accept the default destination folder, or browse to set a new folder (by using the [Change] button). Select [Next].
11. **Working Folder** Tecplot 360 project files will save to this location by default. Accept the default working folder or browse to set a new folder for any new data files that you create (by using the [Change] button). Select [Next].
12. **Installation Mode** Specify whether to perform a custom or complete installation. The complete installation installs all components of Tecplot 360.
13. **Install the Program** Select the [Install] button to begin the installation.
14. **Finish** Once the installation process completes, select the [Finish] button.

Proceed to the next section to configure your local machine to communicate with a Tecplot License Manager.

Local License Manager Files Installation

Follow these directions to set up your individual license file or local license manager (FLEX LM) files.

Evaluation License Setup

If you have an **Evaluation** license, save the *tecplotlm.lic* file containing your license key to the Tecplot 360 installation directory, replacing the empty *tecplotlm.lic* file created by your installation. If you have not received your *tecplotlm.lic* file, contact Technical Support.

Single-User License Setup

If you have a **Single-User** license, you will need to obtain a license key file.

1. The Tecplot 360 installation will automatically generate and display the *myhostids.txt* file and add it to your installation directory. Use the contents of this file to request a license key from Technical Support. Refer to "Obtaining License Key Files" on page 18 for more information.
2. You will receive a *tecplotlm.lic* file from Technical Support that contains your license key. To activate this key, save the *tecplotlm.lic* file to the Tecplot 360 installation directory, replacing the empty *tecplotlm.lic* file created by your installation.

Network or Site License Setup

If you have a **Network** or **Site** license, you or your System Administrator must install FLEXnet (the license manager) on the network server. You must then configure your *tecplotlm.lic* file before you can run Tecplot 360 on your local machine. If you entered the name of your server in Step 7. of your product installation, you have already configured your *tecplotlm.lic* file (Step 2. following).

1. To set up a **Network** or **Site** license, install the FLEXnet License Manager on the network server. See "FLEX LM Installation on Windows Platforms" on page 6 for instructions.
2. Configure the *tecplotlm.lic* file on your local machine to communicate with the server. The *tecplotlm.lic* file resides in

your Tecplot 360 installation directory. This file must include your server name and port number. If you do not know the name of your network server, contact your System Administrator. Once you receive the server information from your System Administrator, replace "myserver" in your *tecplotlm.lic* file with the correct information.

You cannot run Tecplot 360 until the *tecplotlm.lic* file contains your server information. Once that file contains the name of your network server, Tecplot 360 can communicate with the Tecplot License Manager, and you may borrow and return licenses.

Additional Information: Windows Vista Users

If you choose to run Tecplot 360 on Windows Vista, you must have administrator rights on your computer in order to install it.

Running Windows Vista with an Open GL-accelerated card may cause you to experience display issues in Tecplot 360 and Tecplot Focus. If you experience strange video behavior (for example, phantom glyphs or screens that don't refresh), we recommend you follow these steps:

- Disable the "Windows Aero" display mode. To do this, right-click on the desktop and go to **Personalize>Window Color and Appearance**. Choose "Open classic appearance properties", and change the Color Scheme to either "Windows Vista Basic" or "Windows Standard". Select [Apply] and [OK] to finish.
- Check with your video card vendor to see if they have an update for Windows Vista. Update your video driver.
- If these steps have still not solved the issues, you may want to disable hardware acceleration. To do this, open your *tecplot.cfg* file and uncomment this line (by removing the "#"):

  ```
  # $!INTERFACE OPENGLCONFIG { ALLOWHWACCELERATION = NO }
  ```

  The *tecplot.cfg* file resides in your home directory. On Windows platforms, this is usually

  C:\Program Files\Tecplot\Tec360 2008, or

  C:\Program Files\Tecplot\TecFocus 2008.

Macintosh Installation

The steps to install Tecplot 360 on a Macintosh® machine differ significantly from the steps for an installation on a Windows machine. Follow the instructions below to install Tecplot 360 on a Macintosh system. Refer to the Release Notes for further information on Macintosh installations.

For Mac OS versions 10.4 and earlier, if you have not already installed X11 on your system, you will need to install it before you can run Tecplot 360. The installation instructions for X11 are platform dependent:

For Mac OS® 10.3, download X11 from Apple's website at http://www.apple.com/support/downloads/x11formacosx.html.

For Mac OS version 10.4, install X11 using your Mac OS installation DVD.

Macintosh Installation Instructions

You may also use the Linux installation procedure in a terminal window (the DVD mount in */Volumes*). To use the Linux procedure, see the "Linux Installation Instructions" on page 22. You must have administrative privileges to install Tecplot 360 using the Linux script.

To install Tecplot 360 on a Macintosh platform, do the following:

1. **Install Directory** For a download installation, save the appropriate setup executable to your hard drive. For a DVD installation, insert the Tecplot 360 DVD into your DVD drive. Open the DVD contents by double-clicking on the Tecplot 360 disk icon on your desktop, then double-click on the folder appropriate for your CPU.
2. **Install File** For a download installation, double-click the *.dmg* file icon to launch the installer. For a DVD installation,

double-click the Tecplot 360 Install icon to launch Apple's package installer and install Tecplot 360.

3. **Begin** Select the [Continue] button.
4. **Read Me** After reading the Read Me notes, select the [Continue] button.
5. **Software License Agreement** Read and accept the license agreement in order to continue with the installation.
6. **Destination** Select a destination volume. This step will create a new folder (by default, */Applications/Tec360_2008*), in which the installation will save the Tecplot 360 program files.
7. **Continue** Select the [Continue] button.
8. **Install** On the Easy Install window, select the [Install] button. If prompted, enter the name and password for an account with administrator privileges. If you do not have this account information, contact your System Administrator.
9. **Installation Type** Choose your installation type:
   - **Purchased** - Select "Purchased" if you have purchased a **Network**, **Site**, or **Single-User** license.
   - **Evaluation** - Select "Evaluation" if you have an evaluation copy of Tecplot 360.
10. **License Type** If you selected "Purchased", select your license type, and select the [Next] button.

Your license type is also printed on the yellow sticker inside your DVD case. See "License Type Definitions" on page 15 for details. If you downloaded your installation and do not have a license number, contact Technical Support.

   - **Single-User** - Select the "Single-User" radio button.
   - **Network** or **Site License** - Enter the name of the License Manager server in the "myserver" field.
11. **Continue** Select the [Continue] button.

You have now completed your license setup. To change your license configuration, re-run the LicenseSetup utility. Proceed to the next section to configure your local machine to communicate with the Tecplot License Manager.

Local License Manager Files Installation

Follow these directions to set up your individual license file or local license manager (FLEX LM) files.

Evaluation License Setup

If you have an **Evaluation** license, save the *tecplotlm.lic* file containing your license key to the Tecplot 360 installation directory (by default, */Applications/Tec360 2008*), replacing the empty *tecplotlm.lic* file created by your installation. If you have not received your *tecplotlm.lic* file, contact Technical Support.

Single-User License Setup

If you have a **Single-User** license, you will need to obtain a license key file.

1. The Tecplot 360 installation will automatically generate and display the *myhostids.txt* file and add it to your installation directory[1]. Use the contents of this file to request a license key file from Technical Support. Refer to "Obtaining License Key Files" on page 18 for more information.
2. You will receive a *tecplotlm.lic* file from Technical Support that contains your license key. To activate this key, save the *tecplotlm.lic* file to the Tecplot 360 installation directory, replacing the empty *tecplotlm.lic* file created by your installation.

Network or Site License Setup

If you have a **Network** or **Site** license, you or your System Administrator must first install FLEX LM on the network server. You must then configure your *tecplotlm.lic* file before you can run Tecplot 360 on your local machine. If you entered the name of your server in Step 10. of your product installation, you have already configured your *tecplotlm.lic* file (Step 2. following).

1. To set up a **Network** or **Site** license, install the Tecplot License Manager on the network server. See "FLEX LM Installation on Mac/Linux Platforms" on page 10 for instructions.

1. By default, tecplot installs to this directory: */Applications/Tec360_2008*.

2. Configure the *tecplotlm.lic* file on your local machine to communicate with the server. The *tecplotlm.lic* file resides in your Tecplot 360 installation directory (by default, */Applications/Tec360_2008*). This file must include your server name and port number. If you do not know the name of your network server, contact your System Administrator. Once you receive the server information from your System Administrator, replace "myserver" in your *tecplotlm.lic* file with the correct information.

You will not be able to run Tecplot 360 until the *tecplotlm.lic* file contains your server information. Once that file contains the name of your network server, Tecplot 360 can communicate with the Tecplot License Manager, and you may borrow and return licenses.

File Associations

Your Mac OS manages associations between file types and applications. Installers cannot modify these associations. You can modify these associations manually with the following steps:

1. Single-click on a file of the desired type (such as a *.plt* file).
2. Press Command-I, or select **File>Get Info** to display the **Info** dialog for that file type.
3. In the **Open With** menu, select the desired Tecplot 360 application. If the menu does not list the application you want, select [Other] and navigate to your desired Tecplot 360 application.
4. You may optionally select the [Change All] button to change the associations for all files of the selected type.
5. Select the [Continue] button, and then close the **Info** dialog.

ALT Key Assignment

Apple's X11 server for Mac OS X does not treat the Command or Option key as an Alt key. To assign the Command or Option key as an Alt key, add the following line to */etc/X11/xinit/xinitrc* file:

```
xmodmap -e "keycode 66 = Alt_L"
```

This change will take effect when the X server is restarted. To test this feature without restarting, type the **xmodmap** command in at a terminal window.

Linux Installation

To install Tecplot 360 on a Linux®/Unix® operating system, we suggest that you log in as **root**. This allows you to complete the installation in a system directory, such as **/usr**. Follow the steps in this chapter to install Tecplot 360 on a Linux or Unix operating system.

Environment Variable Setup

An installation stores the Tecplot 360 program and its associated files in the Tecplot 360 home directory. To run Tecplot 360 successfully, assign the path for the Tecplot 360 home directory to the environment variable *$TEC_360_2008*. Also, include the **bin** subdirectory of the Tecplot 360 home directory in your PATH environment variable.

These steps assume that your Tecplot 360 home directory is */usr/tec360_2008*.

1. Add the following to your *.profile*[1] file (for Bourne or Korn) or to your *.bash_profile* file (for Bash) in your login home directory:

   ```
   export TEC_360_2008=/usr/tec360_2008
   ...{pre-existing code}...
   export PATH=$TEC_360_2008/bin:$PATH360
   ```

The following procedures depend upon the type of shell you are using. If you do not know what type of shell you are using, type the following command: **echo $SHELL**. A response of **/bin/ksh** means you are using the Korn shell, a response of **/bin/sh** means you are using the Bourne shell, and a response of **/bin/bash** means you are using the BASH shell.

2. Activate all changes made to your *.profile* file by doing the following (choose the commands appropriate to your shell):

• For the Korn or Bourne shells, run the following command:

1. If you do not have a *.bash_profile* or *.profile* file, create this file.

```
. ./.profile
```

- For the Bash shell, run the following command:

```
. ./.bash_profile
```

When invoked as a login shell, Bash looks in these locations (in order) for commands:

```
. ./profile
. ./.bash_profile
. ./.bash_login
. ./.profile
```

The Ubuntu system, which will use the Bash shell as its default, may not contain the **`.bash_profile`** file. If this is the case, you may create the file, or put the Tecplot commands in one of the other files above. Use syntax identical to the commands provided on page 21.

Linux Installation Instructions

To install Tecplot 360 on a Linux/Unix system, perform these steps:

1. **Install Directory** To install from a downloaded file, save the appropriate setup executable to your hard drive. (Refer to the "Supported Platforms" on page 4 to determine which file to download for your system. Once you have downloaded this file, you will need to untar it to continue.) For a DVD installation, insert the Tecplot 360 DVD in the DVD drive (exact DVD mounting procedures may vary between platforms).
2. **Install File** If installing from a downloaded file, navigate to the location of that setup file. If installing from a DVD, switch to the **`linux`** subdirectory under the root directory of the DVD. This directory is generally named */cdrom* or */CDROM*.
3. **Setup Script** Launch the setup script (**`./setup`**).
4. **License Type** The script prompts you to choose from the following options:

   1. Install Tecplot 360

   Select this option to install with a **Single-User** License, or to install a local copy of Tecplot 360 with a **Network** or **Site** License.

2. Install License Manager
Select this option to install the Tecplot License Manager (FLEX LM) as the System Administrator on a **Network** or **Site** license server.

3. Install Tecplot 360 and the License Manager
Select this option to install both Tecplot 360 and FLEX LM as the System Administrator on a **Network** or **Site** license server.

5. **Confirmation** Type `accept` to accept the license agreement and continue.
6. **Platform** Specify the platform for your Tecplot 360 installation from the list of available platforms.
7. **License Type** Specify your license type:
   - **Network** or **Site** license - Type **N** to proceed.
   - **Single-User** license - Type **S** to proceed.
   - **Evaluation** license - Type **E** to proceed.
8. **Home Directory** When asked for the name of your Tecplot 360 home directory, enter the full path to the home directory that you specified in the "Environment Variable Setup" on page 21.

   If you have an **Evaluation** license, proceed from this point to "Evaluation License Setup" on page 24.
9. **License Number** Enter your license number (provided on a yellow sticker inside your installation DVD case).

   If you have a **Single-User** license, proceed from this point to "Single-User License Setup" on page 24.
10. **Host Machine** Enter the name of the Host machine. Enter the name or IP address of the License Manager server. If you do not know your server information, you may leave the entry as "myserver" and proceed with the installation.

    If you have a **Network** or **Site** license, proceed from this point to "Network or Site License Setup" on page 24.

Local License Manager Files Installation

Follow these directions to set up your individual license file or local license manager (FLEX LM) files.

Evaluation License Setup

If you have an **Evaluation** license, save the *tecplotlm.lic* file containing your license key to the Tecplot 360 installation directory that you specified in the "Environment Variable Setup" on page 21, replacing the empty *tecplotlm.lic* file created by your installation. If you have not received your *tecplotlm.lic* file, contact Technical Support.

Single-User License Setup

If you have a **Single-User** license, you will need to obtain a license key file.

1. The Tecplot 360 installation will automatically generate and display the *myhostids.txt* file and add it to your installation directory[1]. Use the contents of this file to request a license key file from Technical Support. Refer to "Obtaining License Key Files" on page 18 for more information.
2. You will receive a *tecplotlm.lic* file from Technical Support that contains your license key. To activate this key, save the *tecplotlm.lic* file to the Tecplot 360 installation directory, replacing the empty *tecplotlm.lic* file created by your installation[1].

Network or Site License Setup

If you have a **Network** or **Site** license, you or your System Administrator must install FLEX LM on the network server. You must then configure your *tecplotlm.lic* file before you can run Tecplot 360 on your local machine. If you entered the name of your server in Step 10. of your product installation, you have already configured your *tecplotlm.lic* file (Step 2. following).

1. To set up a **Network** or **Site** license, install the Tecplot License Manager on the network server. See "FLEX LM Installation on Mac/Linux Platforms" on page 10 for instructions.
2. Configure the *tecplotlm.lic* file on your local machine to communicate with the server. The *tecplotlm.lic* file resides in your Tecplot 360 installation directory. This file must include your server name and port number. If you do not

1. By default, Tecplot 360 installs to this directory: *$TEC_360_2008*

know the name of your network server, contact your System Administrator. Once you receive the server information from your System Administrator, replace “myserver” in your *tecplotlm.lic* file with the correct information.

You will not be able to run Tecplot 360 until the *tecplotlm.lic* file contains your server information. Once you have entered the name of your network server, Tecplot 360 can communicate with the Tecplot License Manager, and you may borrow and return licenses.

Additional Information

Use the following information for additional help to run Tecplot 360 on a Linux/Unix platform.

Tecplot 360 Start-Up

To run Tecplot 360, type **`tec360`**.

Reference the User’s Manual or the Quick Reference Guide for a complete description of Tecplot 360’s command line options.

Running Tecplot 360 Remotely

If you purchased a **Network** or **Site** license, you may run Tecplot 360 remotely using the X Window System. X Window System programs send their output to the display identified by the **`DISPLAY`** environment variable. Enter one of the following commands to set your environment variable:

- If your login shell is the Bourne or Korn shell, type:

  `export DISPLAY=`*`hostnameofclientmachine`***`:0`**

- Or, use the **`-d`** flag on the command line. For example:

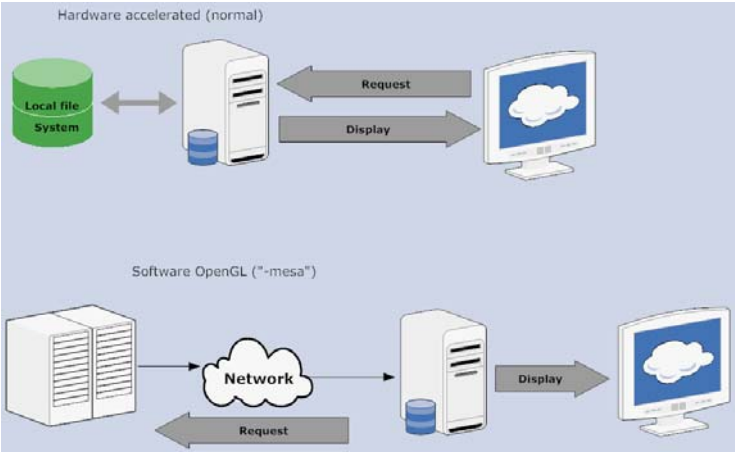
  `tecplot -d` *`computername`***`:0`**

If you purchased a **Single-User** license, Tecplot 360 must run and display on the same computer.

If you choose to work remotely with complex geometries[1], using the **`-mesa`** option (available on non-Windows platforms) will force computation to occur at the server. This may result in better display performance. At least two clients, VNC and ThinAnywhere, will automatically use this option. However, on other clients, like Reflection or Cygwin, you will need to specify the **`-mesa`** flag to enable

1. On the order of 50M polygons or elements

this. This diagram illustrates the difference in data calculation when a computer uses the **-mesa** option:



Linux Help Configuration

Tecplot's HTML Help works by default with Firefox and Internet Explorer. To configure it for use in another browser (for example, Safari or Konquerer), you will need to make slight modifications to the *LaunchBrowser* file located in the **bin** directory. The comments in the file should provide sufficient information for you to customize your settings. If you have trouble viewing the help files, contact your System Administrator.

License Manager Installation

The **Network** and **Site** versions of Tecplot 360 and Tecplot Focus operate under the control of FLEXnet, a third-party license manager. Install the FLEXnet License Manager (FLEX LM) on only one computer on your network, even if you have licenses for multiple copies of Tecplot 360 or Tecplot Focus. In order to install and configure FLEX LM, you must have Administrator privileges on the computer you designate as the network server.

With the **Network** or **Site** license, a user may check out a license on any Linux, Unix, Mac or Windows client from a server based on any of these four operating systems. To install Tecplot 360 on a client after installing FLEX LM on the server, follow the installation steps for the appropriate operating system. Choose the network license type and enter the name of the machine that runs the license server.

The network server machine must meet the following criteria:

- The machine must be on the network where Tecplot 360 or Tecplot Focus is installed.
- The machine must be up and running when users are running Tecplot 360 or Tecplot Focus on any machine in your network.
- The machine must be of a type and operating system that Tecplot 360 or Tecplot Focus supports. See "System, Graphics, and Display Recommendations" on page 3 for more information.
- For **Network** licenses, the license server must be set up so that it can communicate via TCP/IP with all machines on which you will be running Tecplot 360 or Tecplot Focus. (For example, the license server should respond to **telnet** or **ping**.)

FLEX LM Installation on Windows Platforms

1. **Install Directory** For a download installation, navigate to and save the appropriate setup file to disk from http://tecplot.com/support/sms_login.aspx. You will need your SMS

login to access the downloadable file. For a DVD installation, insert the Tecplot 360 DVD into your DVD drive.

2. **Install File** To install from a downloaded file, navigate to the location of your saved setup file and double-click on the executable file to begin installation. To install from DVD, navigate to the *Windows* directory of your installation DVD and launch the *FLM_setup32.exe* or *FLM_setup64.exe* file.
3. **Begin** Select [Next] to begin FLEX LM installation.
4. **User Information** Fill out the *Name* and *Organizatio*n fields. Select whether to install the application for all users or only for the current login, and select the [Next] button.
5. **Destination Folder** Accept the default destination folder, or browse to set a new folder. The default destination folder is usually *C:\Program Files\Tecplot\flexnet*. Select [Next].
6. **Install the Program** Select the [Install] button to begin the installation.
7. **Finish** Once the installation finishes, select the [Finish] button to exit FLEX LM installation wizard.

FLEX LM installation will automatically generate and display the *myhostids.txt* file. This file gathers the information necessary to obtain your license key file. (You can also find this information in the *C:\Program Files\Tecplot\flexnet* directory.) Copy the information in the *myhostids.txt* file and send it to Technical Support to request a license key file. Refer to "Obtaining License Key Files" on page 18 for more information.

Once you have received your *tecplotlm.lic* license file, copy the file into your FLEXnet installation subdirectory. (By default, *\Tecplot\flexnet* functions as the FLEXnet installation subdirectory. This will replace a temporary, empty *tecplotlm.lic* file.) You cannot run Tecplot 360 or Tecplot Focus until you have placed the functional *tecplotlm.lic* file in this location.

If you choose to install the Tecplot License Manager on a Windows XP platform, you may need to adjust your firewall settings. Follow the steps outlined in "Running FLEX LM on Windows XP Platforms" on page 20.

Configuring FLEX LM as a Windows Service

On Windows platforms, you can configure the license manager (**`lmgrd`**) to start and stop by commands received through a user interface and to run in the background. To start the license manager automatically at system startup, you may need to configure it as a Windows Service.

To configure FLEX LM as a Windows Service, do the following:

1. Open the **LMTOOLS** dialog by navigating to **Start>All Programs>Tecplot** and selecting "FLEXnet License Tools".
2. On the Service/License File page, select the "Configuration using Services" radio button.
3. Go to the Config Services page.
4. In the "Service Name" field, type in **`teclmd`**, or select **`teclmd`** from the drop-down list.
5. In the "Path to the lmgrd.exe file" field, enter or browse to *lmgrd.exe* for this license server system[1].
6. In the "Path to the license file" field, enter or browse to the *tecplotlm.lic* license file[1].
7. In the "Path to the debug log file" field, enter or browse to the *teclmd.log* debug log file for the license server system[1].

To save the new **`teclmd`** License Manager service, select "Save Service".

Tecplot License Manager StartUp and Shut Down

FLEX LM Manual StartUp

To manually start FLEX LM from the **LMTOOLS** dialog, do the following:

1. Start LMTOOLS by navigating to **Start>All Programs>Tecplot** and selecting "FLEXnet License Tools".
2. On the Service/License File page, select the "Configuration using Services" radio button.
3. Go to the Config Services page.
4. In the "Service Name" field, type in **`teclmd`** or select **`teclmd`** from the drop-down list**.**

1. By default, this file installs into the *C:\Program Files\Tecplot\FLEXnet* folder.

5. Select the Start/Stop/Reread page.
6. Highlight **`teclmd`** in the FLEXnet license services field.
7. Select the [Start Server] button to start FLEX LM.

FLEX LM Automatic StartUp

To start FLEX LM automatically from the **LMTOOLS** dialog, do the following:

1. Start **LMTOOLS** by navigating to **Start>All Programs>Tecplot** and selecting "FLEXnet License Tools".
2. On the Service/License File page, select the "Configuration using Services" radio button.
3. Go to the Config Services page.
4. In the "Service Name" field, type in **`teclmd`** or select **`teclmd`** from the drop-down list.
5. Toggle-on "Use Services" to make FLEX LM a Windows Service.
6. Toggle-on "Start Server at Power Up".
7. Go to the Start/Stop/Reread page. Toggle-on "Force Server Shutdown" if licenses are currently borrowed. Users currently borrowing licenses will lose their ability to run Tecplot 360 or Tecplot Focus, but they will have an opportunity to save their project files.

FLEX LM will now launch automatically at system startup.

FLEX LM Shut Down

The **`lmdown`** utility shuts down selected license daemons on the network license server. You can also shut down FLEX LM from the Start/Stop/Reread page of the **LMTOOLS** dialog.

To shut down FLEX LM from the **LMTOOLS** dialog, do the following:

1. Open the **LMTOOLS** dialog in **Start>All Programs>Tecplot>FLEXnetLicense Tools**.
2. On the Service/License File page, select the "Configuration using Services" radio button.
3. Select **`teclmd`** from the list box.
4. Select the Start/Stop/Reread page.
5. Highlight **`teclmd`** license service.
6. Select the [Stop Server] button to stop FLEX LM.

To shut down FLEX LM from the command line, use the following syntax:

```
lmdown -c license_file_list [-vendor
vendor_daemon] [-q][-force]
```

These commands have simple meanings:

-c license_file_list	This represents either the full path to a single license file, or a directory where files with the extension **.lic* are used.
-q	This bypasses the "Are you sure? [y/n]" prompt.
vendor_daemon	The vendor daemon is "teclmd".
-force	The **lmdown** command will execute only from the network license manager machine, and then only if the user adds -force.

FLEX LM Installation on Mac/Linux Platforms

If you followed the Linux installation procedure and selected to install Tecplot 360 or Tecplot Focus and the License Manager, the FLEX LM setup script will launch automatically.

Linux Install

If you are installing the License Manager separately on a Linux machine, use the following procedure:

1. To install from a downloaded file, save the appropriate setup file to disk from http://www.tecplot.com. For a DVD installation, insert the Tecplot DVD in the DVD drive (exact DVD mounting procedures may vary between platforms).
2. Switch to the **linux** (**LINUX**) or **Unix** (**UNIX**) subdirectory under the root directory of the DVD. This directory is generally named */cdrom* or */CDROM*.
3. Launch the setup script (**./setup**).
4. Select **Option 2** to Install the License Manager only.
5. Specify the platform for your installation from the list of available platforms.
6. Enter the full path to a new or existing License Manager directory.

You have now completed installing the Tecplot License Manager.

Macintosh Install

If you are installing the License Manager separately on a Macintosh machine, follow these instructions:

1. Navigate to the *Macintosh* directory of your installation DVD and launch the *tecplotlm.pkg* file (located within the *Intel* or *PowerPPC* subdirectory).
2. Select the [Continue] button.
3. After reading the Read Me notes, select the [Continue] button.

   The Tecplot License Manager software will instal to the */Library/Application Support/TecplotLM* destination volume.
4. On the Easy Install window, select the [Install] button. If prompted, enter the name and password for an account with administrator privileges. If you do not have this account information, contact your System Administrator.
5. After the files are installed, select the [Close] button.

License Setup

During FLEX LM installation, the *myhostids.txt* file gathers the information necessary to obtain your license key file. (You can also find this information in the License Manager directory that you specified in the steps above.) Use the information in the *myhostids.txt* file to request a license key file from Technical Support. Refer to "Obtaining License Key Files" on page 18 for more information.

Once you have received your *tecplotlm.lic* license key file, copy the file into the FLEXnet installation subdirectory, replacing the empty *tecplotlm.lic* file created by your installation. You cannot run Tecplot 360 or Tecplot Focus until you have placed the *tecplotlm.lic* file into this location.

Tecplot License Manager StartUp and Shut Down

The **`TecplotLM`** script automatically starts the Tecplot License Manager when your computer starts up. You can view this script in the */Library/StartupItems/TecplotLM* directory.

To start, stop, or restart the license manager, use the following flags to run the *TecplotLM* script from the command line:

```
/Library/StartupItems/TecplotLM/TecplotLM start
/Library/StartupItems/TecplotLM/TecplotLM stop
/Library/StartupItems/TecplotLM/TecplotLM restart
```

Running the License Administration Tools

The executable *lmutil* provides all FLEXnet license utility functions. You can use the following steps to control the executable:

Linux/Mac Platforms - Run **`lmutil`** (located in the License Manager home directory) from a system startup script.

Windows Platforms - Run *lmutil.exe* from the LMTOOLS graphical interface, or through the command line by using the following syntax:

$TEC_360_2008`\FLEXnet> lmgrd -c license_file_list -L [+]debug_log_path`

These commands follow a simple logic:

`license_file_list`	This variable points either to a single license file or to the directory containing files with the extension **.*lic*.
`debug_log_path`	This represents the full path to the debug log file. To append logging entries, prepend this command with a "+".

License Administration Utility Overview

The following table lists available license administration utilities. For a more comprehensive explanation of utilities, refer to the FLEXnet User's Guide included in your Tecplot License Manager installation files, or visit:

http://download.tecplot.com/doc/FLEXnet_manager.pdf.

lmdialog	Diagnoses license checkout problems
lmdown	Gracefully shuts down selected license daemons (both **`lmgrd`** and all vendor daemons) on the license server machine
lmhostid	Reports the hostid of a system
lmnewlog	Moves existing report log information to a new file name and starts a new report log file with existing file name
lmpath	Allows users direct control over license file path settings
lmremove	Releases a hung license to the pool of free licenses
lmreread	Causes the license daemon to reread the license file and start any new vendor daemons

lmstat	Displays the status of a license server system
lmswitch	Controls debug log location and size
lmswitchr	Switches the report log to a new file name
lmver	Reports FLEXnet licensing version of a library or binary file

Running Multiple License Managers

If you choose to run multiple license managers on your network, contact your System Administrator for assistance. If you, as the System Administrator, need more information, reference the FLEXnet User's Guide included in your Tecplot License Manager installation files, or read http://download.tecplot.com/doc/flexnet_manager.pdf.

Additional Information

For more information about your FLEXnet License Manager, or for various troubleshooting issues, refer to the next chapter, Useful Information.

Useful Information

This chapter covers useful post-installation knowledge on running Tecplot 360 software on your machine(s). Topics include the following:

- User Documentation Sources
- License Type Definitions
- Checking Out/Returning Licenses Over a Network
- Common License File Error Message
- Obtaining License Key Files
- Changing License Servers
- License File Syntax
- Network Licenses for Multiple Tecplot Products
- Troubleshooting Your Connection to FLEX LM
- Running FLEX LM on Windows XP Platforms
- Running Tecplot Products on a Laptop

User Documentation Sources

Where can I go for help understanding Tecplot 360?

The user documentation for Tecplot 360 covers many aspects of the product in these nine books:

- Installation Instructions - These instructions give a detailed description of how to install Tecplot 360 on your machine.
- Getting Started Manual - New Tecplot 360 users are encouraged to work through the tutorials provided in the Getting Started Manual. These tutorials highlight how to work with key features in Tecplot 360.
- User's Manual - This manual provides a complete description of working with Tecplot 360 features.
- Scripting Guide - This guide provides Macro and Python command syntax and information on working with Macro and Python files and commands.
- Quick Reference Guide - This guide provides syntax for zone header files, macro variables, keyboard shortcuts, and more.

- Data Format Guide - This guide provides information on outputting simulator data to Tecplot 360 file format.
- Add-on Developer's Kit - User's Manual - This manual provides instructions and examples for creating add-ons for Tecplot 360.
- Add-on Developer's Kit - Reference Manual - This manual provides the syntax for the functions included in the add-on kit.
- Release Notes - These notes provide information about new and/or updated Tecplot 360 features.

Our **Tecplot Talk** online forum serves as an ever-expanding resource for dynamic answers from other Tecplot product users as well as from Tecplot Technical Support personnel. Discussions, questions and answers cover topics of Tecplot 360, Tecplot Focus, Python Scripting, Add-on development, TecIO, and more. Visit the forum at www.tecplottalk.com.

License Type Definitions

What license options do I have?

Three basic license types govern usage of Tecplot 360 for Linux, Unix, Macintosh, and Windows platforms: **Evaluation** licenses, **Single-User** licenses, and **Network** or **Site** licenses. The installation procedure depends upon the type of license purchased. Your license number is provided on a yellow sticker inside your installation DVD case. If you would like to upgrade your license, please contact Tecplot, Inc. or your distributor.

- **Evaluation License -** An **Evaluation** license allows one user to fully experience the software's features and functionality. This license has a usage time limit.
- **Single-User License -** A **Single-User** license allows a single user to install the software on up to three machines: one work computer, one home computer, and one portable computer. The one user agrees that no more than one installation will be in use at any given time. **Single-User** licenses cannot display remotely.
- **Network or Site License -** A **Network** or **Site** license allows users to run the software anywhere within a local area network (LAN), for a specified number of users. This floating license allows you to install the software on as many comput-

ers in your LAN as you desire. For this license type, you must run the software in conjunction with the FLEXnet License Manager (FLEX LM).

To set up a **Site** license, your organization must designate one person as the official contact for the license. That contact will act as communicator with Tecplot, Inc. He or she will receive a set of license key files from Tecplot, Inc. Once you have obtained your *tecplotlm.lic* license key file from your contact, place this file in your FLEX LM installation directory.

Checking Out/Returning Licenses Over a Network

How does a network license work?

When a user runs Tecplot 360 or Tecplot Focus on any machine in the network, Tecplot 360 or Tecplot Focus contacts the license server via TCP/IP and "checks out" a key from the License Manager. When the user quits, the License Manager "returns" the key. The License Manager limits the number of Tecplot 360 or Tecplot Focus sessions currently active to the number of users allowed by the license.

The FLEXnet License Manager Daemons

The FLEXnet License Manager consists of two daemon applications (**`lmgrd`** and **`teclmd`**) that run on the network server. These daemons manage the allocation of keys to Tecplot 360 and Tecplot Focus users. During the time that a local machine borrows a license, Tecplot 360 or Tecplot Focus on that machine routinely sends out a signal to the server. If FLEX LM does not get a signal after a certain period of time, FLEX LM frees up the borrowed license for that instance of Tecplot 360 or Tecplot Focus. If Tecplot 360 or Tecplot Focus tries to contact the Network Server after the server has freed that license, Tecplot 360 or Tecplot Focus will no longer allow the user to redraw, but will still allow the user to save the current layout and exit. The user must check out a new license from FLEX LM to regain full use of Tecplot 360 or Tecplot Focus.

In order to run Tecplot 360 or Tecplot Focus, the machine that runs the License Manager daemon must have a license key file installed. If you do not have a license key file, see the instructions located in the "Obtaining License Key Files" on page 18.

Borrowing a License on a Local Network

1. To set the borrow period and initiate borrowing, go to the **Help** menu and select "Borrow Network License". If this options appears gray, you have chosen and configured a **Single-User** license or **Evaluation** license. You will need to obtain and configure a **Network** or **Site** license to connect to your server.

Do not use the **LMTOOLS** dialog for borrowing or returning licenses. Instead, use the Tecplot 360 or Tecplot Focus **Help** menu.

2. A dialog appears that asks you if you want to continue. If you have unsaved changes to your work, select the [No] button and save your work before continuing.
3. In the "Borrow a License" field of the **Enter Value** dialog, enter the number of days you would like to borrow a **Network** license, and select the [OK] button.
4. An information dialog appears and states whether the license was borrowed successfully.
5. The software will shut down automatically after the local machine has borrowed a **Network** license.
6. Reopen the product to complete the borrowing process.

Returning a Borrowed License

1. To return a borrowed license, go to the **Help** menu and select "Return Network License".
2. A dialog appears that asks you if you want to continue. If you have unsaved changes to your work, select the [No] button and save your work before continuing.
3. An information dialog appears and states whether the license was returned successfully.
4. The software will automatically shut down after a Network license has been returned. You will need to reopen the product to continue working.

To view the license number and borrow status, go to **Help>About Tecplot**.

Common License File Error Message

I cannot get my license key to work!

When you or your System Administrator installs Tecplot 360, you may encounter this error:

"The license file *tecplotlm.lic* doesn't contain a valid key."

This error message appears if your installation directory does not contain the *tecplotlm.lic* file, or if that file does not contain a valid license key. If you have a **Network** or **Site** license, contact your System Administrator. If you have a **Single-User** license, contact Technical Support to obtain a valid license key file.

If you know that you have a valid license file, try re-copying that file into the installation directory, and/or check that Tecplot 360 recognizes the directory that contains the license file as the installation directory. By default, Tecplot 360 considers *C:\Program Files\Tecplot\Tec360 2008* the installation directory.

Obtaining License Key Files

How do I get a license key?

Request a license key file using one of these methods:

- **Internet:** www.tecplot.com/support/key_request.aspx.
- **E-mail:** support@tecplot.com.
- **Telephone:** +1-425-653-9393

Remember to specify your License Number and Host ID whenever you request a new license key file.

Windows: During installation, FLEXnet records your Host ID in your *myhostids.txt* file, and automatically saves that file to your default FLEXnet installation folder.

Linux, Mac and Unix: If you do not know your Host ID, run the **`setuplic`** utility (located in the License Manager home directory) and choose option **`1. Get HOSTID information`**.

Changing License Servers

What if I want to change which machine hosts my network?

Your license key links to your Host ID, which is based on your license server's Mac address or machine name. If your operating system changes, or if you wish to move the License Manager to a different

server, send a request for a new key file to Technical Support, or to your local distributor. Include your license number and your new Host ID in your request.

License File Syntax

How can I edit my license file?

The license file, *tecplotlm.lic*, contains network server system names and Host IDs, the path to the **teclmd** daemon executable, and feature information. The license file uses a default port number of **27001.**

For a local installation with a network license, the *tecplotlm.lic* file uses this syntax:

SERVER *hostname portnumber*

USE_SERVER

This license will work for both Tecplot 360 and Tecplot Focus, if the host machine has both products installed with the appropriate license file configured.

FLEX LM uses this syntax for the local machine's *tecplotlm.lic* file:

SERVER	*hostname macaddress portnumber*
VENDOR	**teclmd** *portnumber*
FEATURE	*Tecplot Product and license type*

Network Licenses for Multiple Tecplot Products

What if I want to have both Tecplot 360 and Tecplot Focus on my network? Do I get two license files?

If you procure licenses to install both Tecplot 360 and Tecplot Focus on your network, you will receive one license file for your server that enables both Tecplot 360 and Tecplot Focus on your network. One *tecplotlm.lic* file will contain both license keys. The syntax of that file will look like this (do not edit):

SERVER	*hostname macaddress portnumber*
VENDOR	**teclmd** *portnumber*
FEATURE	**TECPLOT 360** *and license type*
FEATURE	**TECPLOT FOCUS** *and license type*

Troubleshooting Your Connection to FLEX LM

I cannot get my FLEX LM to work!

If you experience problems connecting to your license manager, try changing the following items in your *tecplotlm.lic* file:

- Change your port number to another number within the acceptable range (27001-27009).
- Use your IP address in place of the machine name. You can determine your IP address on a Windows machine by typing **ipconfig** in the command prompt.

Running FLEX LM on Windows XP Platforms

How can I get my FLEX LM to work on Windows XP?

If you choose to host a FLEX LM on a Windows XP machine, the default firewall on that machine may not allow Tecplot 360 or Tecplot Focus on local machines to contact FLEX LM. Adjust the following settings on the server to allow Tecplot 360 and Tecplot Focus through the firewall.

1. Launch the **Control Panel**.
2. Select the **Windows Firewall** control.
3. In the **Windows Firewall** dialog, select the Exceptions page.
4. Select the [Add Port] button.
5. Set Name = “FLEXLM”.
6. Set Port = 27001.
7. Choose the UDP radio button.
8. (Optional) Select the [Change scope] button and modify the computers that can use this port. We recommend “My network (subnet) only”.
9. Select the [OK] button to apply the changes and close the dialog.

You can now use your Tecplot 360 or Tecplot Focus **Network** license on your Windows XP machine.

Running Tecplot Products on a Laptop

Can I run Tecplot products on my laptop?

If you use Tecplot 360 or Tecplot Focus on a laptop, you must have your network card enabled (though not necessarily connected).